

## SELF-ENERGIZING BRAKE SYSTEM

### Abstract

A braking system comprised of a rotor, a plurality of actuators, a brake control unit and a by-pass valve. When in a brake-on mode of operation, the brake control unit effects  
5 braking by restricting the flow of a working fluid that is pumped in and out by each of the plurality of actuators as they engage the rotating rotor. The degree of restriction to the flow of the working fluid can be varied to adjust the amount of braking force applied. The brake system is self-energizing in that it is not reliant on a substantial external source to create the operating pressure necessary to effect braking. Operating the by-pass valve  
10 into a by-pass on position effectively negates the generation of braking forces normally resulting from operation into the brake-on mode of operation while still allowing the actuators to engage the rotor and working fluid to be circulated.